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LSA

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November 11, 1998

Bruce Halstead
U.S. Fish and Wildlife Service
1125 16th Street, Room 209
Arcata, CA 95521

John Munn
California Department of Forestry
1416 Ninth Street
Sacramento, CA 95814

Subject: Permit numbers PRT-828950 and 1157; SYP 96-002

Dear Sirs:

Please consider the attached comments in your review of Pacific Lumber Company's Sustained Yield Plan/Habitat Conservation Plan and your own Draft Environmental Impact Statement/Environmental Impact Report for the Headwaters Forest Acquisition and the PALCO Sustained Yield Plan and Habitat Conservation Plan.

If you have any questions, please contact me at (949) 553-0666.

Sincerely,

LSA ASSOCIATES, INC.

Richard A. Erickson

Richard Erickson
Associate/Biologist

Attachment

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COMMENTS ON THE SUSTAINED YIELD PLAN/HABITAT CONSERVATION PLAN FOR THE PROPERTIES OF THE PACIFIC LUMBER COMPANY, SCOTIA PACIFIC HOLDING COMPANY, AND SALMON CREEK CORPORATION (PUBLIC REVIEW DRAFT DATED JULY, 1998), ESPECIALLY CONCERNING TEN COVERED SPECIES OF BIRDS

Richard A. Erickson and Roger D. Harris
LSA Associates, Inc.

The following comments concern primarily the following ten bird species that are treated as Covered (List A) Species in the Sustained Yield Plan/Habitat Conservation Plan (SYP/HCP): double-crested cormorant (*Phalacrocorax auritus*), great blue heron (*Ardea herodias*), great egret (*Casmerodias albus*), snowy egret (*Egretta thula*), black-crowned night-heron (*Nycticorax nycticorax*), Vaux's swift (*Chaetura vauxi*), pileated woodpecker (*Dryocopus pileatus*), purple martin (*Progne subis*), yellow warbler (*Dendroica petechia*), and yellow-breasted chat (*Icteria virens*).

GENERAL COMMENTS

1) A primary concern in evaluating a habitat conservation plan (HCP) is the guarantee that the measures called for will in fact be implemented. This is emphasized on page 7-4 of the HCP Handbook (USFWS/NMFS 1996). As much as one might like to operate optimistically and in good faith, now is the time to confirm that adequate language is in place to ensure that the terms and conditions of the HCP are met. The HCP needs substantially more detailed assurances regarding mitigation implementation and achievement of prescribed performance standards. Likewise, sufficient funding, reporting, monitoring, and organizational resources need to be better assured in the document.

   By no means is this concern limited to the applicant. Indeed, in our experience, it is often the agencies that fail to provide the repeated input and review that proper implementation of the HCP demands, and that is clearly called for in the existing language of the SYP/HCP (cf. Hamilton 1998). As unforeseen circumstances squeeze budgets and overburden agency personnel, open-ended consultation by the agencies is likely to suffer. The resources required for agency participation in the ongoing SYP/HCP process should be guaranteed in writing at this time.

LSA-1

2) As Robert Hrubes has emphasized, the SYP/HCP does not provide a clear definition of what is meant by late seral forest. What is stated suggests a rather generous category that does not match traditional definitions of this habitat. Nor does the SYP/HCP provide sufficient detail on other plant communities present in the SYP/HCP area. Nevertheless, we believe a substantial reduction in the amount of late seral forest in an area as large as the HCP area represents a significant impact in and of itself.

LSA-2

3) A reduction in hardwood forest of more than 95 percent in the first three decades of the SYP/HCP is predicted on Table 10 (volume I). We judge this to be a significant negative impact in an area as large as the HCP area, especially in light of several vireo and warbler species that are closely associated with hardwoods in the redwood region. Affected nesting species that would likely decline in numbers roughly proportional to the loss of hardwoods include Cassin's (*Vireo cassinii*), Hutton's (*V. huttoni*), and warbling vireos (*V. gilvus*), and black-throated gray warbler (*Dendroica nigrescens*). LSA-3

4) Similarly, several plant and animal species are known to exist in greatest numbers in old growth and late seral forest. Reduction in the amount of this habitat, as detailed in the SYP/HCP, also amounts to a significant negative impact, which we do not believe is fully mitigated by the proposed measures. As discussed in section 3.10.1.2 of the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR; USFWS/CDF 1998:), habitat fragmentation will likely exacerbate the impact of this reduction for many species. The contribution of the SYP/HCP to cumulative effects on late seral forest in the redwood region is also significant, yet there appears to be no discussion of cumulative impacts anywhere in the SYP/HCP. Although the EIS/EIR discusses cumulative effects (Section 3.10.2.2), there appear to be no regulatory conclusions drawn. LSA-4

5) Careful consideration should be given to section 7.2.3 (Amendment of the Permit to Allow Covered Activities within Marbled Murrelet (*Brachyramphus marmoratus*) Conservation Areas - MMCAs) of the Draft Implementation Agreement. The applicant would be allowed to apply for an amendment to harvest timber in one or more MMCAs if it believes that delisting criteria for the marbled murrelet have been met. In our opinion, this substantially weakens the value of the MMCAs as mitigation for several of the species we discuss below (i.e., Vaux's swift, pileated woodpecker, and purple martin). LSA-5

6) In general, the wildlife monitoring relating to the species considered here is inadequate. Successful adaptive management will not be possible without a constant supply of quality information being fed back into the system. Existing wording (Vol IV, Part E, pages 10, 11, 13-15, 29, and 31-37) is vague and does not specify who will conduct surveys, what their qualifications will be, how surveys will be conducted, and at what intervals. Foresters should not perform surveys or monitoring as an aside to their primary activities; only qualified wildlife biologists or specifically trained individuals should perform monitoring for these species (cf. Marbled Murrelet and EPIC v Pacific Lumber, 880 F.Supp, Ninth Circuit affirmed 1996). Examples of successful monitoring schemes to emulate are available (e.g., spotted owl monitoring conducted by Simpson Timber Company). For all of the covered bird species with no known nesting sites in the SYP/HCP area at this time, especially the colonial ones, annual monitoring should follow the discovery of nesting in the area; monitoring may be limited to the vicinity of the nesting area. This should be a minimum requirement in addition to LSA-6

consultation with the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG). LSA-6

7) The preparers of the SYP/HCP apparently failed to consult a number of critical references. The best available information should have been used in preparing the SYP/HCP to ensure that all potential threats to covered species are identified and properly mitigated. Unused literature sources that would have assisted in proper analysis and mitigation, several particularly relevant to the redwood ecosystem, include Bull (1983), Bull and Collins (1993), Roberson and Tenney (1993), Shuford (1993), Burridge (1995), Sterling and Paton (1996), and Brown (1997). Shuford's work is especially thorough and deals with habitat similar to that covered by the SYP/HCP. Important unpublished work that was not utilized includes wildlife agency and timber industry reports, the ongoing Humboldt County Breeding Bird Atlas, and purple martin data gathered by Williams (1998). Likewise, the considerable experience of local biologists who have worked on PALCO property (and similar properties in the region) appears to have been severely underutilized. This same comment applies to the EIS/EIR as well. LSA-7

8) Several sensitive species (CDFG 1998) potentially present in the SYP/HCP area should have been discussed. In a cursory examination of the literature, we identified the following such species: Del Norte salamander (*Plethodon elongatus*), merlin (*Falco columbarius*), ruffed grouse (*Bonasa umbellus*), long-eared owl (*Asio otus*), olive-sided flycatcher (*Contopus cooperi*), willow flycatcher (*Empidonax traillii*), California horned lark (*Eremophila alpestris actia*), loggerhead shrike (*Lanius ludovicianus*), four species of bats (genus *Myotis*), and American badger (*Taxidea taxus*). Additional species are treated in the DEIS/EIR. LSA-8

9) The snag (and downed wood) policy included in the SYP/HCP (volume II, part M - Structural Components of Wildlife Habitat) is a critical component of the mitigation strategy for several of the species under consideration here (i.e., Vaux's swift, pileated woodpecker, and purple martin) – as well as other cavity nesting birds, and mammals such as bats (Chiroptera), California wolverine (*Gulo gulo luteus*), Humboldt marten (*Martes americana humboldtensis*), and Pacific fisher (*M. pennanti*) – yet we judge it to be inadequate. In particular: LSA-9

   a) The emphasis on Class I and II streams and lower slopes for snag retention does not serve the purple martin (cf. martin comment number 3 below);

   b) The possibility of no snags over 30" d.b.h. being preserved is a problem for several species, especially the purple martin (cf. martin comment number 2 below);

   c) The replacement clause concerning 1:1 substitution of green trees of similar size for snags that may be absent in a harvest unit is too vague; the Baseline Conditions Section of the document

(volume I, section D) does not include the detail necessary to analyze the magnitude of this problem, but it appears that new green trees could be substituted at each harvest without ever allowing green trees to become snag trees of adequate size; green replacement trees must be marked and dedicated permanently in order to mitigate and minimize adverse impacts;

d) There is "no requirement to leave downed logs where they do not exist already," a loophole that could result in many areas lacking downed wood in perpetuity, a situation certainly detrimental to species such as the pileated woodpecker (cf. woodpecker comment number 2 below); again, the Baseline Conditions Section of the document (volume I, section D) does not provide the detail needed to predict the potential magnitude of this problem;

LSA-9

e) The evaluation and consultation process with the wildlife agencies sounds good in principle but, as noted in general comment number 1 above, agency personnel may not be available as planned; and

f) To quickly identify any problems that might result from implementation of the policy, the five year delay until the first assessment should be reduced by at least half.

10) We have a real concern regarding the amount of information available to justify considering these species as "Covered" under the SYP/HCP. Sufficient information on the water associated birds may not be available and information on the others, although possibly obtainable, is not well presented in the document. Note, for example, that there are no maps dealing with any of these species. What are these species' limiting factors in the project area, and what data are there to suggest that the measures in the SYP/HCP will be enough to safeguard these species in the event that they become endangered by potentially unforeseen forces? At a minimum, a stronger case needs to be made that significant adverse impacts on these species will be avoided and/or mitigated, and what specific monitoring plans will document the success of the SYP/HCP in this regard. Short of that, incidental take permission should not be granted for these species.

LSA-10

11) To achieve a successful outcome for this HCP, the regulatory process mandates need to be assured. This issue is particularly relevant to language in the SYP/HCP (voulme IV, part E, pages 10-15 and 29-37; volume II, part M, pages 5-6) concerning a) surveys and other monitoring for covered species; b) periodic evaluations; c) ongoing consultation with the wildlife agencies; and d) the snag and downed wood policy.

LSA-11

COMMENTS ON THE SPECIES ACCOUNTS IN THE HABITAT CONSERVATION PLANS (VOLUME 4, PART E, PAGES 9-15 AND 28-37)

Double-crested cormorant (*Phalacrocorax auritus*)

1) Under letter d, Mitigation Measures, it is stated that disturbance of foraging cormorants is unlikely because gravel operations are not allowed in wetted channels. We believe that heavy equipment working in the vicinity of foraging cormorants would disturb them at some level, but the document does not provide sufficient detail in order to fully analyze potential impacts. LSA-12

2) See general comment number 6 concerning annual monitoring.

Great blue heron (*Ardea herodias*)

1) Under letter d, Mitigation Measures, "March 15 through July 15" is identified as the critical nesting period for this species in the SYP/HCP area. The natural history account (under letter a) implies that the entire month of March is within the breeding period, and Shuford (1993) stated that nesting sites in Marin County are occupied beginning in late January. Because birds are often most susceptible to disturbance during the initial phases of nesting, seasonal restrictions around nest sites should begin when occupancy begins and end when all nesting has ceased, in order to minimize the potential for take. LSA-13

2) See general comment number 6 concerning annual monitoring.

Great egret (*Casmerodias albus*)

1) As discussed under great blue heron, seasonal restrictions around nest sites should begin when occupancy begins and end when all nesting has ceased, in order to minimize the potential for take. LSA-14

2) See general comment number 6 concerning annual monitoring.

Snowy egret (*Egretta thula*)

1) As discussed under great blue heron, seasonal restrictions around nest sites should begin when occupancy begins and end when all nesting has ceased, in order to minimize the potential for take. LSA-15

2) See general comment number 6 concerning annual monitoring.

Black-crowned night-heron (*Nycticorax nycticorax*)

1) As discussed under great blue heron, seasonal restrictions around nest sites should begin when occupancy begins and end when all nesting has ceased, in order to minimize the potential for take. Note that egg dates listed for this species under Natural History (letter a) range from February through July, yet the critical period identified in the Mitigation Measures (letter d) is March 15 through July 15). LSA-16

2) See general comment number 6 concerning annual monitoring.

Vaux's swift (*Cheatura vauxi*)

1) We are unable to assess the "hardwood retention" said to be mitigation for this species. Volume II, part M, states that "in general, percent basal area of hardwoods is higher in the younger, more open stands" that the SYP/HCP will allow, but elsewhere in the SYP/HCP (Table 10, volume 1) a reduction in hardwood forest of more than 95 percent in the first three decades of the SYP/HCP is indicated. LSA-17

2) Under letter e (Potential Impacts of the Incidental Taking), it is implied that the Headwaters Reserve should be considered as partial mitigation for impacts to this species. If the reserve is outside of the SYP/HCP area, it should not be considered as compensatory mitigation; this is the position reflected elsewhere in the SYP/HCP and on page S-8 of the EIS/EIR. LSA-18

3) The monitoring plan for this species (under letter f) is considered inadequate. Although swifts may be detected on some marbled murrelet surveys, the timing of murrelet surveys at dawn does not correspond with the peak period of activity for swifts, and some surveyors are unprepared to monitor species other than murrelets. In addition, in the absence of good baseline data, the five year interval for reporting is too coarse to detect problems that may arise in the period of maximum harvest that is scheduled to occur in the initial decades of the SYP/HCP. Annual reporting should be required. LSA-19

4) General comment number 9 discusses the inadequacy of the snag policy included in the SYP/HCP, an issue especially important for this species.

Pileated woodpecker (*Dryocopus pileatus*)

1) Under letter a (Natural History), the characterization of nest snag size in the second sentence ("approximately 20" diameter at breast height" - d.b.h.) is too low. Compare the average d.b.h. (22", 27", 33", and 38") for nest trees/snags found in four studies cited in the fourth sentence. The SYP/HCP has not allowed for the large snags preferred by this species. LSA-20

2) Under letter d (Mitigation Measures), we disagree with the statement that "Impacts to this species as a whole is [sic] unlikely given the mitigation measures proposed." Numerous studies (summarized by Bull and Jackson 1995) have demonstrated the positive correlation between woodpecker abundance and stand age. Although the SYP/HCP policies regarding snags and downed wood will be helpful (but note "there will be no requirement to leave downed logs where they do not exist already," and the allowance for green tree replacement, significant loopholes discussed in general comment number 9), we see no way around the recognition that the substantial reduction in late seral and old growth habitat allowed by the SYP/HCP will result in a significant adverse impact on this species. Viewed as part of the cumulative effect of the timber industry in the redwood region, the impact is substantially above the significance threshold. LSA-21

3) Under letter e (Potential Impacts of the Incidental Taking), again the statement that "impacts will be avoided, or any levels will be very low" is unrealistic. LSA-22

4) The monitoring plan for this species (under letter f) is considered inadequate. Although woodpeckers may be detected on some marbled murrelet surveys, the timing of murrelet surveys at dawn does not correspond with the period of activity for woodpeckers, and some surveyors are unprepared to monitor species other than murrelets. In addition, in the absence of good baseline data, the five year interval for reporting is too coarse to detect problems that may arise in the period of maximum harvest that is scheduled to occur in the initial decades of the SYP/HCP. Annual reporting should be required. LSA-23

5) Also under letter f (Monitoring/Adaptive Management), no mention is made of the U. S. Forest Service's use of this species as a management indicator species, or the establishment of pileated woodpecker management areas on the national forests. Bull et al. (1992) describe current Forest Service policy regarding 243 hectare management areas (half as nesting habitat and half as foraging habitat) and provide a formula to determine the number of trees to leave as roosts within each management area, including the portion identified as foraging habitat. Mellen et al. (1992) found that adult home ranges of woodpeckers in western Oregon averaged 478 hectares following nesting, and more for pairs. This sort of management (something akin to the Spotted Owl Management Areas) would likely result in a landscape quite different from that proposed in the SYP/HCP. The failure to include such information shows that the applicant has not used the best sources available for analyzing potential impacts or for developing a successful mitigation strategy for this species. LSA-24

Purple martin (*Progne subis*)

1) Although true for the species as a whole, the statement under letter a (Natural History) that this species nests in man-made martin houses is LSA-25

misleading, as this behavior is almost unknown in western North America (Brown 1997, Williams 1998). LSA-25

2) Missing from the Natural History discussion (under letter a) is the association of this species with very large snags. Williams (1998) examined 13 snags used for nesting in California and found d.b.h. to range from 58-271 cm, and average 130 cm (51"); "inaccessible snags were often larger than the ones [he] measured." The d.b.h. of three redwood snags examined were 59", 82", and 107". Six Douglas fir snags ranged from 23-65" and averaged 42". Preliminary data from the Humboldt County Breeding Bird Atlas (Hunter 1998) also emphasizes the very large nature of snags used by this species. Williams (1998) noted further that "the 130 cm mean d.b.h. reported here is much larger than the largest minimum size class recommended for snag retention in Forest Service guidelines and is double the 51 cm minimum diameter used to classify snags as 'large snags.'" LSA-26

3) Based on personal observation and our interpretation of data presented by Shuford (1993), Burridge (1995), and Hunter (1998), there is a tendency for martins to nest along ridges more than drainages, at least in the redwood region. Therefore, the SYP/HCP's emphasis on preservation of old growth characteristics in riparian areas is not best suited for this species. To properly address this species, the SYP/HCP should mitigate for the loss of large snags on ridges. LSA-27

4) Under letter e (Potential Impacts of the Incidental Taking), the statement that "adverse impacts will be avoided, or any levels will be very low" is not supported by the information provided. Although timber harvesting may do nothing to hamper foraging opportunities for this species (Williams 1998), outside of the Riparian Management Zones (RMZs) and MMCAs, the SYP/HCP does nothing to preserve or create the large snags preferred by this species (i.e., no specific plan for preservation of snags over 30" d.b.h. – volume II, part M, measure 1) and acknowledges that "the majority of snags and leave trees will be concentrated along Class I and II streams." LSA-28

5) See general comment number 6 concerning annual monitoring.

Yellow warbler (*Dendroica petechia*) and
Yellow-breasted chat (*Icteria virens*)

1) Depending upon noise levels, gravel operations could be considered disruptive to nesting birds (i.e., take). Mitigation measures (e.g., sound walls, seasonal restrictions, nest monitoring) are routinely required by the U.S. Fish and Wildlife Service in Southern California for potential noise impacts on nesting populations of threatened and endangered passerines (songbirds). The SYP/HCP does not provide sufficient detail (e.g., predicted noise levels/contours) to analyze potential noise impacts. LSA-29

CONCLUSIONS

We have come to several conclusions relative to the regulatory adequacy of the SYP/HCP:

1) We do not believe the guarantees provided in the SYP/HCP are adequate (cf. general comment number 1). We want to believe that all parties will abide by the terms of the SYP/HCP, but what is needed aremore defined assurances that the goals of the plan will be achieved. LSA-30

2) The SYP/HCP should identify all potentially significant impacts to fish and wildlife. In our opinion, the information in the SYP/HCP is insufficient to properly gauge the effect of the plan on most of the plant and animal communities involved. There is no mention at all of the endangered willow flycatcher (*Empidonax traillii*) and other special animals that could occur in significant numbers in the SYP/HCP area (cf. general comment 8). LSA-31

3) Both the federal and State endangered species acts require that the best scientific information available be used in reviewing the adequacy of the SYP/HCP, especially as the Fish and Wildlife Service prepares its Biological Opinion. As noted in our general comment number 7, the SYP/HCP does not fully utilize local experts or the gray literature, or incorporate the information contained in several critical sources. LSA-32

4) We believe that several of the analyses provided in the SYP/HCP are inadequate for California Environmental Quality Act (CEQA)/National Environmental Protection Act (NEPA) purposes. Specifically, these include: LSA-33

   a) Reduction of late seral forest and other plant communities (cf. general comments number 2 and 4);

   b) Reduction of hardwood forest (cf. general comment number 3);

   c) Impact on the pileated woodpecker (cf. woodpecker comments number 2-5 and general comment number 5);

   d) Impact on the purple martin (cf. martin comments number 2-5 and general comment number 5); and

   e) Potential noise impacts (cf. double-crested cormorant comment number 1 and yellow warbler/yellow-breasted chat comment).

5) The Draft Implementation Agreement clearly states that CDFG must find that the impacts to covered species are "minimized and *fully* mitigated" (emphasis ours). As discussed above, we do not believe that the SYP/HCP provides sufficient mitigation for adverse impacts on the pileated woodpecker (cf. woodpecker comments number 2, 3, and 5) and purple martin (cf. martin comments number 2-4), or potential impacts LSA-34

on nesting waterbirds (cf. comment number 1 for all herons and egrets). LSA-34

6) There appears to be no analysis or discussion regarding cumulative effects of the SYP/HCP, a conspicuous omission in our opinion (cf. general comment number 4 and woodpecker comment number 2). Although the EIS/EIR discusses cumulative effects (Section 3.10.2.2), there appear to be no regulatory conclusions drawn. LSA-35

7) Adaptive management requires current and accurate information on the covered species. As discussed under general comment number 10, we believe the SYP/HCP is lacking in this regard and does not meet the intent of HCP guidelines. Successful monitoring is essential to adaptive management; deficiencies in the SYP/HCP monitoring plan are discussed in general comment number 6. LSA-36

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT FOR THE HEADWATERS FOREST ACQUISITION AND THE PALCO SUSTAINED YIELD PLAN AND HABITAT CONSERVATION PLAN, ESPECIALLY CONCERNING TEN COVERED SPECIES OF BIRDS

Richard A. Erickson and Roger D. Harris
LSA Associates, Inc.

The following comments concern primarily the following ten bird species that are treated as Covered (List A) Species in the Sustained Yield Plan/Habitat Conservation Plan (SYP/HCP): double-crested cormorant (*Phalacrocorax auritus*), great blue heron (*Ardea herodias*), great egret (*Casmerodias albus*), snowy egret (*Egretta thula*), black-crowned night-heron (*Nycticorax nycticorax),* Vaux's swift (*Chaetura vauxi*), pileated woodpecker (*Dryocopus pileatus*), purple martin (*Progne subis*), yellow warbler (*Dendroica petechia*), and yellow-breasted chat (*Icteria virens*). These comments are an extension of our comments on the SYP/HCP, and should be considered in that context. For the following reasons, we believe that some of the conclusions of the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) are not warranted, given the evidence presented:

1) The attention paid to State and federally listed species in the EIS/EIR is greater than that paid to the ten species considered here. Yet, as clearly stated on page 3.10-18, in this document all List A species are to be considered "Endangered, Rare or Threatened with respect to CEQA." Affected Environment sections are devoted to all of these species, but coverage for impacts and (especially) mitigation is deficient for the ten unlisted species. Mitigation for all ten of these species from the SYP/HCP is superficially treated in Appendix Table M-2, but there is no specific discussion of these species under Environmental Effects (Section 3.10.2). Several appear only in Table 3.10-9 (Thresholds of Significance and Comparison of Effects of the Alternatives on Wildlife Resources), where they are relegated to mere footnotes. Specific problems with the mitigation measures are covered in our SYP/HCP comments on each species, and have not been addressed in the EIS/EIR. (As an aside, on pages 3.10-137 and 3.10-141 respectively, note that mitigation measures for the Aleutian Canada goose (*Branta canadensis leucopareia*) and western little willow flycatcher (*Empidonax traillii brewsteri*) are said to be included in Appendix Table M-2, yet there is no mention of either species in Appendix Table M-2.) LSA-37

2) The statement under "Thresholds of Significance" (3.10-88) that "If this proposed mitigation minimizes or mitigates those effects, they are considered to be less than significant" is far too generous to the applicant. The effects of various mitigation measures must be evaluated on a case by case basis, and may or may not be sufficient to reduce impacts to a level less than significant. LSA-38

3) Page 3.10-20 states that "As part of developing the HCP/SYP analyzed in this document, PALCO conducted extensive species-specific and multi-species monitoring studies on its lands, particularly for species with special federal or state status." This appears to be a gross overstatement. As noted in our comments on the SYP/HCP, we have a real concern regarding the amount of information available to justify considering a number of species as "Covered" under the SYP/HCP. Sufficient information on the water-associated birds may not be available and information on the others, although possibly obtainable or even in existence, is not presented well in the document. Note, for example, that there are no maps dealing with any of these species in either document. What are these species' limiting factors in the project area, and what data are there to suggest that the measures in the SYP/HCP and EIR/EIS will be enough to safeguard these species in the event that they become endangered by potentially unforeseen forces? At a minimum, a stronger case needs to be made that significant adverse impacts on these species will be avoided and/or mitigated, and what specific monitoring plans will document the success of the SYP/HCP in this regard. Short of that, incidental take permission should not be granted for these species. LSA-39

4) Without exception, the EIS/EIR relies on the measures identified in the SYP/HCP as mitigation for potential impacts to the species under consideration here. As stated in our comments on the SYP/HCP (especially concluding comment number 5), we do not believe that the SYP/HCP provides sufficient mitigation for adverse impacts on the pileated woodpecker and purple martin, or potential impacts on nesting waterbirds. LSA-40

5) As with mitigation, the EIS/EIR relies on the monitoring scheme outlined in the SYP/HCP to gauge the success of the SYP/HCP in preserving viable populations of List A species in the project area. As noted in our comments on the SYP/HCP (general comment number 6), we believe the monitoring plan is insufficient to achieve this goal. LSA-41

6) Other problems with the SYP/HCP that also apply to the EIS/EIR include: LSA-42

   a) Inadequate guarantees for the resources required to implement the SYP/HCP (cf. our SYP/HCP concluding comment number 1); and

   b) Inadequate analyses under CEQA for reduction in the amount of late seral forest and hardwood forest, impacts on the pileated woodpecker and purple martin, and potential noise impacts (cf. our SYP/HCP concluding comment number 4).

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Burridge, B. (editor). 1995. Sonoma County Breeding Bird Atlas. Madrone Audubon Society, Santa Rosa, California.

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See original for variety of reference material